

Amendments to the Claims:

1) (Currently amended) An apparatus for measuring the axial length of an the eye of a patient comprising

an ultrasound measuring device ~~comprising a~~ [[€]]probe and a piezoelectric device for generating ultrasound for interrogating the dimensions of the eye and a computer for ~~processing these measurements described in previous art~~ interrogated dimensions, means the probe being configured for directing the focused ultrasound waves of ~~theis~~ ultrasound measuring device along the visual axis into the eye,

means for stabilizing the ultrasound measuring device in relation to the patient,

means for mounting a laser and the ultrasound probe on a carrying platform,

means for projecting a laser spot onto a grid;

~~means to assure so that the projected laser beam axis spot is substantially coaxial~~
~~coincident with the interrogating axis of said ultrasound measuring device, and~~

~~means for assuring the correct horizontal and vertical alignment of said ultrasound probe with relation to the gravitational field of the earth;~~

means for assuring correct pressure applied to the ultrasound probe as it contacts the eye~~[[L]], and~~

~~means for assuring the measurement of the correct axial plane of said eye;~~

2) (Currently amended) The apparatus of claim 1 ~~wherein the means for stabilizing the ultrasound measuring device in relation to the patient comprises further comprising a~~ standard headpiece to which attaches a platform which stabilizes the probe ~~ultrasound measuring device~~ with respect to the patient's head and eye.

3) (Currently amended) The apparatus of claim 1 ~~further wherein the means for projecting a laser spot onto a grid comprises~~ ing a laser beam projection device for alignment of the eye during the measurement procedure.

4) (Currently amended) The apparatus of claim 2 1 wherein the means for assuring correct pressure applied to the ultrasound probe as it contacts the eye comprises ~~further comprising 6~~

independently moveable joints designed to bring the ultrasound measuring device into direct contact with the eye and maintain a ~~this~~ stationary relationship without additional manual assistance.

5) (Currently amended) The apparatus of claim 2 1 wherein the means for assuring correct pressure applied to the ultrasound probe as it contacts the eye comprises ~~further comprising a~~ gravity dependent swing arm that applies a ~~the correct~~, constant and adjustable force to the eye throughout the ultrasound measuring process.

6) (Currently amended) The apparatus of claim 5 further comprising means for assuring the correct horizontal and vertical alignment of said ultrasound probe with relation to the gravitational field of the earth ~~a bubble level for assuring proper and constant pressure on by the ultrasound tip during measurement.~~

7) (Currently amended) The apparatus of claim 2 further comprising a carrying platform attached to a swing arm that carries the ultrasound probe, wherein the means for projecting a laser spot onto a grid comprises a laser beam projection device for alignment of the eye during the measurement procedure, a laser projection device that is coincident with the laser and means for assuring the correct horizontal and vertical alignment of said ultrasound probe with relation to the gravitational field of the earth ~~a second bubble level for assuring proper horizontal and vertical alignment of the ultrasound probe during measurement.~~

8) (Currently amended) The apparatus of claim 7 further comprising a laser beam projection device that is projected onto a grid approximately 10 feet from the apparatus which is used as a fixation target and further used ~~to adjust the amount of force applied to the ultrasound tip as described in claim 5.~~

9) (Currently amended) A ~~The~~ process of measuring the axial length of a patient's ~~the~~ eye with the ultrasound device including the steps of: (a) Administering one or more ~~A~~ anesthetic drops; (b) Properly fitting a ~~the~~ headpiece on the patient; (c) Properly aligning an ~~the~~

ultrasound probe tip over the eye to be measured while reflecting a laser beam on a visual reference in the patient field of vision, the laser beam axis being substantially coaxial with an interrogating axis of ultrasound waves emitting from the ultrasound probe; (d) as needed, modifying~~Modifying~~ the position of ~~a~~ the swing arm to assure proper pressure is applied ~~by~~ to the ultrasound probe tip during measurement; (e) as needed, modifying~~Modifying~~ the position of ~~a~~ the carrying platform to assure proper horizontal and vertical alignment of the interrogating axis beam from the ultrasound probe tip during measurement; (f) ~~C~~confirming by direct observation of the contact point between the ultrasound probe and the cornea that the correct pressure is being applied to the cornea during measurement; and (g) ~~M~~measuring the axial length of said eye with ultrasound upon contact with the eye.

10) (New) The apparatus of claim 6, wherein the means for assuring the correct horizontal and vertical alignment of said ultrasound probe with relation to the gravitational field of the earth comprises a bubble level.

11) (New) The apparatus of claim 7, wherein the means for assuring the correct horizontal and vertical alignment of said ultrasound probe with relation to the gravitational field of the earth comprises a bubble level.